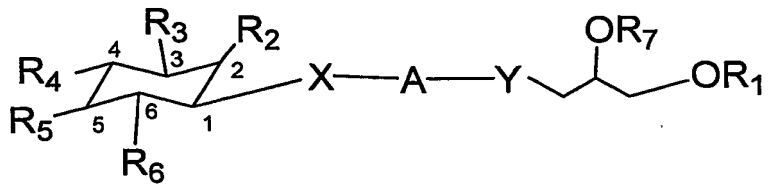
WHAT IS CLAIMED IS:

1. A compound of the formula I:



(I)

or a pharmaceutically acceptable salt thereof;

wherein X and Y are independently selected from the group consisting of O, CF_2, CH_2, and CHF;

wherein A is independently selected from the group consisting of P(O)OH, CH_2COOH, and $CH(COOH)_2$;

R_2 is selected from the group consisting of H, OH, isosteres of OH, C_1-C_{25} alkyloxy, C_6-C_{10} aryloxy, C_3-C_8 cycloalkyloxy, C_3-C_8 cycloalkyl C_1.C_6 alkoxy, C_2-C_{22} alkenyloxy, C_3-C_8 cycloalkenyloxy, C_7-C_{32} aralkyloxy, C_7-C_{32} alkylaryloxy, C_9-C_{32} aralkenyloxy, and C_9-C_{32} alkenylaryloxy;

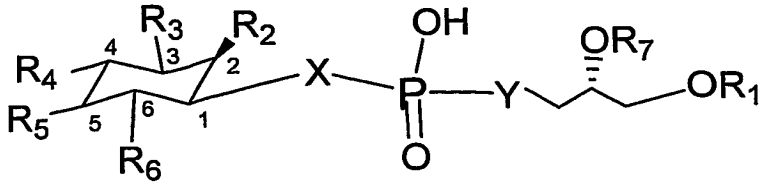
R_3-R_6 are independently selected from the group consisting of H, OH, isosteres of OH; and

R_1 and R_7 are independently selected from the group consisting of C_1-C_{25} alkyl, C_6-C_{10} aryl, C_3-C_8 cycloalkyl, C_2-C_{22} alkenyl, C_3-C_8 cycloalkenyl, C_7-C_{32} aralkyl, C_7-C_{32} alkylaryl, C_9-C_{32} aralkenyl, and C_9-C_{32} alkenylaryl;

with the provisos that (i) when X is O, Y is O or CH_2, and R_3 is H, at least one of R_2 and R_4-R_6 is not OH; (ii) when A is CH_2COOH or $CH(COOH)_2$, X and Y cannot be simultaneously O; and (iii) all of R_2-R_6 are not simultaneously H.

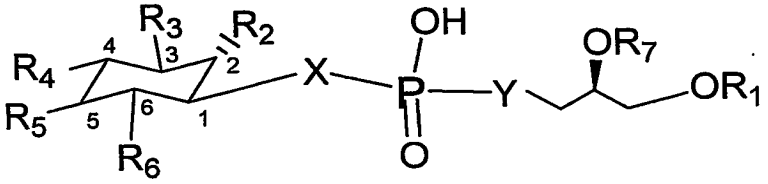
2. The compound of claim 1, wherein A is P(O)OH.

3. The compound of claim 1 or 2, which has the formula Ia:



(Ia).

4. The compound of claim 1 or 2, which has the formula Ib:



(Ib).

5. The compound of any of claims 2-4, wherein X and Y are O.

6. The compound of any of claims 1-5, wherein R_1 is a C_1-C_{25} alkyl.

7. The compound of any of claims 1-6, wherein R_1 is a C_{10}-C_{25} alkyl.

8. The compound of any of claims 1-7, wherein R_1 is a C_{15}-C_{20} alkyl.

9. The compound of any of claims 1-8, wherein R_1 is a C_{18} alkyl.

10. The compound of any of claims 1-9, wherein R_7 is a C_1-C_{25} alkyl.

11. The compound of any of claims 1-10, wherein R_7 is a C_1-C_{15} alkyl.

12. The compound of any of claims 1-11, wherein R_7 is a C_1-C_5 alkyl.

13. The compound of any of claims 1-12, wherein R_7 is methyl.

14. The compound of any of claims 1-13, wherein R_2 is C_1-C_{25} alkyloxy.

15. The compound of any of claims 1-14, wherein R_2 is C_1-C_{15} alkyloxy.

16. The compound of any of claims 1-15, wherein R_2 is C_1-C_5 alkyloxy.

17. The compound of any of claims 1-16, wherein R_2 is methoxy.

18. The compound of any of claims 1-13, wherein R_2 is C_7-C_{32} aralkyloxy.

19. The compound of any of claims 1-13 and 18, wherein R_2 is cyclohexylmethoxy.

20. The compound of any of claims 1-13, wherein R_2 is H.

21. The compound of any of claims 1-13, wherein R_3 is H.

22. The compound of any of claims 1-13, wherein R_4 is H.

23. The compound of any of claims 1-13, wherein R_5 is H.

24. The compound of any of claims 1-13, wherein R_6 is H.

25. The compound of any of claims 1-13, wherein R_2 and R_3 are H.

26. The compound of any of claims 1-13, wherein R_3 and R_4 are H.

27. The compound of any of claims 1-13, wherein R_5 and R_6 are H.

28. The compound of claim 3, wherein X and Y are O, R_1 is $C_{18}H_{37}$, and R_7 is methyl.

29. The compound of claim 28, wherein R_2 is methoxy, R_3 is H, and R_4-R_6 are OH.

30. The compound of claim 28, wherein R_2-R_3 are H and R_4-R_6 are OH.

31. The compound of claim 28, wherein R_2-R_3 and R_5-R_6 are OH and R_4 is H.

32. The compound of claim 28, wherein R_2 is i-butyloxy, R_3 is H, and R_4-R_6 are OH.

33. The compound of claim 28, wherein R_2 is cyclohexylmethoxy, R_3 is H, and R_4-R_6 are OH.

34. The compound of claim 28, wherein R_2-R_3 and R_6 are OH and R_4-R_5 are H.

35. The compound of claim 28, wherein R_2-R_4 and R_6 are OH and R_5 is H.

36. The compound of claim 28, wherein R_2, R_4, and R_6 are OH and R_3 and R_5 are H.

37. A pharmaceutical composition comprising a compound of any of claims 1-36 and a pharmaceutically acceptable carrier.

38. A method of preventing or treating a disease, or a condition that predisposes to a disease, which is characterized by the activation of the serine/threonine kinase Akt in an animal comprising administering to the animal a preventive or treatment effective amount of a compound of any of claims 1-36.

39. The method of claim 38, wherein the disease is a cancer.

40. The method of claim 39, wherein the cancer is breast cancer, lung cancer, ovarian cancer, uterine cancer, brain cancer, sarcoma, melanoma, leukemia, lymphoma, colorectal cancer, prostate cancer, or liver cancer.

41. The method of claim 38, wherein the disease is a rheumatologic disease.

42. The method of claim 41, wherein the rheumatologic disease is rheumatoid arthritis or osteoarthritis.

43. The method of claim 38, wherein the disease is a pulmonary disease.

44. The method of claim 43, wherein the pulmonary disease is chronic obstructive pulmonary disease (COPD).

45. The method of claim 38, wherein the disease or condition is a precancerous lesion.

46. The method of claim 38, wherein the disease is a cardiovascular disease.

47. The method of claim 38, wherein the disease is a dermatologic disease.

48. The method of claim 38, wherein the disease is a gynecological disease.

49. The method of claim 38, wherein the disease is a vascular disease.

50. The method of claim 38, wherein the disease is a neurologic disease.

51. The method of claim 38, wherein the disease is an infectious disease.

52. The method of claim 38, wherein the infectious disease is a bacterial, viral, retroviral, or parasitic disease.

53. A method of increasing apoptosis of a cell comprising contacting the cell with a compound of any of claims 1-36.

54. A method for inhibiting PH domain binding comprising exposing a material containing an PH domain to a compound of any of claims 1-36.

55. A method for determining the presence of a PH domain in a material comprising:
(a) exposing a sample of said material to a PH domain binding compound and obtaining a first binding result;
(b) exposing another sample of said material to a compound of any of claims 1-36 and obtaining a second binding result; and
(c) comparing the first and second binding results to determine whether a PH domain is present in the material.